Claims

1. A process for producing a monoglyceride-containing composition, comprising the step of reacting glycerin with at least one kind of an acyl-containing compound selected from the group consisting of a fatty acid and a glycerin ester, using a catalyst comprising at least one metal selected from the group consisting of iron, cobalt and manganese in an amount of 0.1 to 60 ppm in terms of metal as a weight ratio thereof to the total weight of the glycerin and the acyl-containing compound.

2. The process according to claim 1, wherein at least one mole of glycerin is used and reacted with 1 mole of the acyl group in the acyl-containing compound.

3. The process according to claim 1 or 2, wherein glycerin is reacted with the acyl-containing compound and then the glycerin is distilled away in the presence of the metal-containing catalyst.

4. The process according to any one of claims 1 to 3, wherein the metal is iron.

5. The process according to any one of claims 1 to 4, comprising the step of maintaining the amount of water at 500 to 5000 ppm in the reaction system after the degree of conversion in the reaction of glycerin with fatty acid reaches 90% or more based on the fatty acid, or during the ester exchange reaction of glycerin with glycerin ester.

6. The process according to any one of claims 1 to 5, wherein the number of carbon atoms in the acyl group in the acyl-containing compound is 12 to 30.

7. The process according to any one of claims 1 to 6, wherein the reaction temperature is 180 to 270°C.

8. The process according to any one of claims 1 to 7, wherein the monoglyceride content in the monoglyceride-containing composition as determined by GPC analysis is 55 area-% or more.

9. A process for producing a monoglyceride-containing composition, comprising the step of reacting glycerin with at least one kind of an acyl-containing compound selected from the group consisting of a fatty acid and a glycerin ester, wherein the amount of water is maintained at 500 to 5000 ppm in the reaction system after the degree of conversion in the reaction of glycerin with fatty acid reaches 90% or more based on the fatty acid, or during the ester exchange reaction of glycerin with glycerin ester.

10. The process according to claim 9, wherein at least 1 mole of glycerin is used and reacted with 1 mole of acyl group in the acyl-containing compound.

11. The process according to claim 9 or 10, wherein the number of carbon atoms in the acyl group in the acyl-containing compound is 12 to 30.

12. The process according to any one of 9 to 11, wherein the reaction temperature is 180 to 270°C.

13. The process according to any one of claims 9 to 12, wherein the monoglyceride content in the monoglyceride-containing composition as determined by GPC analysis is 55 area-% or more.